Remarks

Claims 27-40 and 50-64 are pending in the application. Claims 27-40 and 50-64 were rejected. Claims 27-39, 50, 52-61, and 63 are amended. Claims 27 and 52 are the independent claims. Reconsideration of the amended application is respectfully requested.

The examiner objected to claims 52, 62, and 63 because of a noted informality. Claims 52, 62, and 63 are amended to correct this informality. The objection, therefore, should be withdrawn.

The examiner rejected claims 27-40 and 50-64 as being anticipated by Ockelmann et al.

Independent claim 27 recites an apparatus for displaying luminous radiation on a shell of an aircraft. The apparatus includes at least one light source, at least one projection device, and at least one translucent turret. The at least one light source produces luminous radiation. The at least one projection device is arranged within the interior of the shell, converts the luminous radiation into projectable luminous radiation, and projects the projectable luminous radiation across the interior of the shell. The at least one translucent turret is sealed against the interior of the shell at a respective at least one fixed location. Each projection device is arranged within a respective translucent turret. The shell is translucent at least in portions, such that the projected luminous radiation is visible from the outside the shell. The shell includes at least one lead-through. Each lead-through is disposed at a respective fixed location. Each projection device is arranged in the respective turret such that the projection device can be installed within and removed from the turret from outside the shell through the lead-through.

Ockelmann et al. disclose an aerial vehicle that includes an image projections set-up that projects images from the inside of the vehicle envelope onto the sides of the vehicle envelope, so that they can be seen from outside the vehicle through the translucent surface of the envelope. The image projection set-up includes an image projecting device 15 in the gondola of the vehicle, and scanners 17 that are mounted on the inner side 21 of the vehicle envelope and which receive image data from the projecting device 15. The vehicle envelope includes carrier ties 9 sewn to the envelope tissue 8 for reinforcement. See the translation at page 6, line 30 though page 7, line 4.

In contrast to the claimed invention, the Ockelmann et al. scanners 17 are mounted within tissue bags 22 that are sewn at predetermined positions of carrier ties 9 arranged on the envelope. The scanners 17 are fittingly sewed within these cube-shaped bags 22. See the translation at page 8, lines 13-16, Fig. 5. Ockelmann does not disclose a shell that includes at least one lead-through disposed at a respective fixed location at which a translucent turret is sealed against the interior of the shell, and a projection device arranged in the turret such that the projection device can be installed within and removed from the turret from outside the shell through the lead-through, as recited in claim 27.

The examiner stated that Ockelmann discloses at least one lead-through, at 22, for optical cable 23, being arranged at the shell 7, 9 of the aircraft 1 for arranging of at least one turret 22, which is translucent and sealed against the interior of the shell (inherently from the cubes 22 in order to transmit a light beam from the scanner 17), and the at least

one projection device 17 is exchangably arranged in the at least one turret 22, citing Figures 1-5 and the translation at page 1, page 6 lines 20-31, and pages 7 and 8.

It is respectfully pointed out that the "cubes" 22 that the examiner identified as the claimed turrets are actually bags that are disposed completely within the interior of the envelope. The bags 22 are sewn at the carrier ties 9 which in turn are sewn to the envelope (from in the interior of the shell). The envelope 7 of the aircraft 1 consists of a tear-proof envelope tissue 8, which is as lightweight as possible and translucent. As noted previously, this envelope tissue 8 is provided with carrier ties 9 that form cross connections 10. The carrier ties 9 are sewn substantially equidistant from each other in parallel and vertical directions in the envelope tissue 8. See the translation at page 6, line 30 through page 7, line 4.

Regarding the bags 22, Fig. 5 illustrates how the scanners 17 are mounted on the inner side 21 of the envelope. The tissue bags 22 are sewn at predetermined positions of the carrier ties 9. In these tissue bags 22, which have the form of cubes, the scanners 17 are fittingly sewn. See the translation at page 8, lines 13-16.

The scanners 17 are coupled via fiber optic cables 23 with the control device 16 and the laser bank 15. The fiber optic cables 23 are sewn in or at the carrier ties 9. A guide at the interior side 21 of the envelope is shown in Fig. 5. However, it is also possible and even advantageous to arrange the glass fiber cables 23 at the exterior side of the envelope. The fiber optic cable 23 goes, as shown in Fig. 3, to the gondola 12 at the bottom side 11 of the aircraft. See the translation at page 8, lines 18-24.

The examiner assumed that the Ockelmann et al. envelope includes a lead-through for the optical cable 23 to go through, because the optical fiber 23 can be arranged at the exterior side of the envelope and the projection device 17 is mounted on the inside. Ockelmann does mention that the fiber optic cables can be arranged at the outside of the envelope. However, Ockelmann does not disclose or suggest a lead-through disposed at a respective fixed location at which a translucent turret is sealed against the interior of the shell, and a projection device arranged in the turret such that the projection device can be installed within and removed from the turret from outside the shell through the lead-through, as recited in claim 27. Rather, as shown in Fig. 5, Ockelmann discloses bags 22 that are sewn to the carrier ties, and fiber optic cables 23 also sewn to the carrier ties 9 and brought to the bags 22. If the fiber optic cable 23 is arranged on the outside of the envelope, a lead-through must be provided somewhere, but a turret arranged at a lead-through is not shown or suggested, and it is clear from the view shown in Fig. 5 that the lead-through is arranged at a location other than where the tissue bag 22 is sewn onto the carrier tie.

Ockelmann also does not disclose or suggest that a turret arranged at a lead-through is sealed against the interior of the shell, also as recited in claim 27. Rather, Ockelmann discloses tissue bags 22 in which the scanners 17 are sewn; it is not disclosed or suggested that these tissue bags are sealed against the interior of the envelope. In fact, Fig. 5, which shows a tissue bag 22, demonstrates otherwise. As shown, the bag 22 is sewn to a carrier tie 9, as described on page 8 at lines 14 and 15. Even if a lead-through were provided at the location where the tissue bag meets the envelope, it is clear that this

lead-through would not allow for the scanner 17 to be installed within and removed from the bag 22 from outside the envelope 7 through the lead-through, as recited in claim 27.

As shown in Fig. 2 of the instant application, the lead-through 40 provides a via for the light guide 30, and also provides a location at which the turret 41 is arranged, as recited in claim 27. An advantage of arranging a turret at a lead-through as claimed is that the projector device that is disposed in the turret is easily accessible from the outside of the shell, so that it can be exchanged, for example, for service. Based on the Ockelmann disclosure, it appears necessary to partially destroy the envelope in order to replace a bag 22 or a scanner 17. This problem would be solved by the claimed invention, which Ockelmann does not disclose or suggest.

For at least the reasons noted above, Ockelmann does not anticipate the invention recited in claim 27, and provides no teachings leading one of skill in the art to modify the disclosed design so as to include the additional elements of claim 27. Claims 28-40, 50, and 51 depend from claim 27, and therefore also are not anticipated by Ockelmann. The rejection of claims 27-40, 50, and 51, therefore, should be withdrawn.

Similarly, independent claim 52 recites an apparatus for displaying luminous radiation on a shell of an aircraft. The apparatus includes at least one light source for producing luminous radiation, and at least one projection device for converting the luminous radiation into projectable luminous radiation. The at least one projection device is arranged against an inside surface of the shell at a lead-through through the shell, such that the at least one projection device can be installed within and removed from the shell from outside the shell through the lead-through. The at least one

projection device is arranged in the interior of the shell so as to project the luminous radiation through the interior on to the shell. The shell is translucent at least in portions, for making the projected luminous radiation visible from the outside. The at least one projection device is adapted for projecting image carrying luminous radiation which is simultaneous with external events and the at least one projection device is adapted for projecting at least one of spatial luminous radiation, time-variable luminous radiation, and moving pictures.

As noted above, Ockelmann et al. disclose an aerial vehicle that includes an image projections set-up that projects images from the inside of the vehicle envelope onto the sides of the vehicle envelope, so that they can be seen from outside the vehicle through the translucent surface of the envelope. The image projection set-up includes an image projecting device 15 in the gondola of the vehicle, and scanners 17 that are mounted on the inner side 21 of the vehicle envelope and which receive image data from the projecting device 15. The vehicle envelope includes carrier ties 9 sewn to the envelope tissue 8 for reinforcement. See the translation at page 6, line 30 though page 7, line 4.

In contrast to the claimed invention, the Ockelmann et al. scanners 17 are mounted within tissue bags 22 that are sewn at predetermined positions of carrier ties 9 arranged on the envelope. The scanners 17 are fittingly sewed within these cube-shaped bags 22. See the translation at page 8, lines 13-16, Fig. 5. Ockelmann does not disclose a shell that includes at least one lead-through at which a projection device is arranged against the interior of the shell, such that the projection device can be installed within and

removed from the turret from outside the shell through the lead-through, as recited in claim 52.

As noted above, the bags 22 are sewn at the carrier ties 9 which in turn are sewn to the envelope (from in the interior of the shell). The envelope 7 of the aircraft 1 consists of a tear-proof envelope tissue 8, which is as lightweight as possible and translucent. This envelope tissue 8 is provided with carrier ties 9 that form cross connections 10. The carrier ties 9 are sewn substantially equidistant from each other in parallel and vertical directions in the envelope tissue 8. See the translation at page 6, line 30 through page 7, line 4.

Regarding the bags 22, Fig. 5 illustrates how the scanners 17 are mounted on the inner side 21 of the envelope. The tissue bags 22 are sewn at predetermined positions of the carrier ties 9. In these tissue bags 22, which have the form of cubes, the scanners 17 are fittingly sewn. See the translation at page 8, lines 13-16.

The scanners 17 are coupled via fiber optic cables 23 with the control device 16 and the laser bank 15. The fiber optic cables 23 are sewn in or at the carrier ties 9. A guide at the interior side 21 of the envelope is shown in Fig. 5. However, it is also possible and even advantageous to arrange the glass fiber cables 23 at the exterior side of the envelope. The fiber optic cable 23 goes, as shown in Fig. 3, to the gondola 12 at the bottom side 11 of the aircraft. See the translation at page 8, lines 18-24.

The examiner assumed that the Ockelmann et al. envelope includes a lead-through for the optical cable 23 to go through, because the optical fiber 23 can be arranged at the exterior side of the envelope and the projection device 17 is mounted on the inside.

Ockelmann does mention that the fiber optic cables can be arranged at the outside of the envelope. However, Ockelmann does not disclose or suggest a shell that includes at least one lead-through at which a projection device is arranged against the interior of the shell, such that the projection device can be installed within and removed from the turret from outside the shell through the lead-through, as recited in claim 52. Rather, as shown in Fig. 5, Ockelmann discloses bags 22 that are sewn to the carrier ties, and fiber optic cables 23 also sewn to the carrier ties 9 and brought to the bags 22. If the fiber optic cable 23 is arranged on the outside of the envelope, a lead-through must be provided somewhere, but a projection device arranged at a lead-through is not shown or suggested, and it is clear from the view shown in Fig. 5 that the lead-through is arranged at a location other than where the tissue bag 22 is sewn onto the carrier tie. Even if a lead-through were provided at the location where the tissue bag meets the envelope, it is clear that this lead-through would not allow for the scanner 17 to be installed within and removed from the envelope 7 from outside the envelope 7 through the lead-through, as recited in claim 52.

As shown in Fig. 2 of the instant application, the lead-through 40 provides a via for the light guide 30, and also provides a location at which the projection device 50 is arranged, as recited in claim 52. An advantage of arranging a projection device at a lead-through as claimed is that the projector device is easily accessible from the outside of the shell, so that it can be exchanged, for example, for service. Based on the Ockelmann disclosure, it appears necessary to partially destroy the envelope in order to replace a bag

22 or a scanner 17. This problem would be solved by the claimed invention, which Ockelmann does not disclose or suggest.

For at least the reasons noted above, Ockelmann does not anticipate the invention recited in claim 52, and provides no teachings leading one of skill in the art to modify the disclosed design so as to include the additional elements of claim 52. Claims 53-64 depend from claim 52, and therefore also are not anticipated by Ockelmann. The rejection of claims 52-64, therefore, should be withdrawn.

In view of the foregoing, it is submitted that all objections and rejections have been overcome. It is therefore requested that the Amendment be entered, the claims allowed, and the case passed to issue.

Respectfully submitted,

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Date

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